

**NUTRIENT FLUXES FROM LAND-BASED SOURCES OF TURKISH
MEDITERRANEAN COAST AND EUTROPHICATION-
OLIGOTROPHICATION PROBLEMS OF THE MEDITERRANEAN
WATERS**

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Mediterranean waters are oligotrophic except perhaps in the neighborhood of large input rivers, agricultural run-off and domestic and industrial waste waters. Although the domestic industrial waste water contributes a negligible of the total fresh water input to the Mediterranean but effluents appear to contribute about 20% and 17% respectively to the total nitrogen and phosphorus inputs. In the Turkish Mediterranean coast, the contribution of the domestic-industrial waste waters to the fresh water input is much less(0.5%) and the both nutrients are transported via rivers. The average annual total nitrogen and phosphorus (organic+inorganic fractions) loads from land-based sources are calculated respectively as 57.2×10^3 and 9.6×10^3 tones for the northeastern Mediterranean corner - mainly Iskenderun and Mersin bays- which is the largest continental shelf and economically important region of the eastern basin. On the other hand Turkish Mediterranean coastal zone receives about 7% of the total Mediterranean water discharges but land-based sources of Turkish Mediterranean coast contributes 5% and 3% of the total nitrogen and phosphorus loads. Eutrophication is a local rather than a regional problem in the Mediterranean and excessive eutrophication is not consistent in the Northeastern Mediterranean coastal areas even there is significant input. The open sea Mediterranean waters, especially the eastern basin waters, however, remain in sharp contrast with coastal waters and it is impoverished in nutrient elements due to the insufficient fresh water input to the surface waters and the concentration are measured at trace levels.



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ABSTRACTS - I
SECTIONS 1 - 3

